

Appendix K

Statement of Consideration

**STATEMENT OF CONSIDERATION
RELATING TO SIP REVISION FOR BOYD COUNTY REDESIGNATION TO
ATTAINMENT
FOR 8-HOUR OZONE
Amended After Comments**

Environmental and Public Protection Cabinet

Department for Environmental Protection
Division for Air Quality

- (1) A public hearing on the State Implementation Plan (SIP) revision for redesignation of Boyd County to attainment for the 8-hour ozone standard was held on July 20, 2006, at 10:00 a.m. The hearing was held at FIVCO Area Development District, 3000 Louisa Street, Catlettsburg, Kentucky. Written and oral comments were received during the public comment period.
- (2) The following individuals attended and/or provided written comments:

Name and Title

Thomas Leigh

Kay Prince

Terri Sicking

Robert Ukeiley

Organization

Catlettsburg Refining, LLC

U.S. EPA

FIVCO ADD

Law Office, Berea, KY

- (3) The following individuals from the Kentucky Environmental and Public Protection Cabinet attended the public hearing and drafted responses to comments received during the public review period.

John Gowins, Environmental Control Supervisor* Division for Air Quality

Susan Weaver, Environmental Technologist III Division for Air Quality

* Agency moderator

Response to Comments for the proposed revision to the State Implementation Plan (SIP) to redesignate Boyd County as attainment for the National Ambient Air Quality Standard (NAAQS) for ozone.

- 1. (a) Comment:** It is clear that the reason that Boyd County has a design value below 0.085 for 2003-2005 is simply because of the usually wet and cool year in 2004.

Robert Ukeiley, law office, Berea, KY

- (b) Response:** The Cabinet disagrees. While weather normally fluctuates each year, becoming cooler or warmer, or more wet or more dry, than the previous year, the overall averaging of ambient data across three years is to lessen the impact of any one year aberration noted in the data. Overall reductions in the ozone precursor emissions which are permanent and enforceable have been documented. The weather will continue to fluctuate from year to year. However this agency is committed to mitigating the impact of ozone-forming precursors and maintaining the National Ambient Air Quality Standard (NAAQS).

- 2. (a) Comment:** There is no evidence that ozone levels in Boyd County are on a long term downward trend. In fact, in 2004, the highest value was 0.079. However, this year, the May 30th reading was above 0.085. Thus, it appears that we are going to have a worse ozone year this year than in 2004, which will increase the design value in 2007. Of course, it is too early for me to tell whether the fourth highest value in 2006 will be above the 4th highest value of 0.068 in 2004 but it does appear to be headed in that direction.

Robert Ukeiley, law office, Berea, KY

- (b) Response:** The Cabinet disagrees. The 8-hour ozone NAAQS uses the fourth high maximum concentration for each year, averaged over three consecutive years. Making an assumption that the standard will be violated based on one day is contrary to the standard itself.

- 3. (a) Comment:** Efforts to re-designation [*sic*] are inappropriate from a public health point of view and a wasteful use of government resources.

Robert Ukeiley, law office, Berea, KY

- (b) Response:** The Cabinet disagrees. From a public health point of view it is appropriate to ask for redesignation of the county, and to allow businesses and people living in the area to know that efforts have been made on their behalf to reduce ozone precursors and that the air quality they are exposed to has achieved the NAAQS for 2003-2005.

- 4. (a) Comment:** Global warming means that ozone levels will increase over time.

Robert Ukeiley, law office, Berea, KY

- (b) Response:** The Cabinet acknowledges this comment. However, global warming and the related international and federal policies are outside the scope of this proposed SIP revision.

5. (a) **Comment:** EPA is currently on a court ordered schedule to revise the ozone NAAQS. It seems like a wasteful use of government resources to go through this attempt to re-designate when the ozone NAAQS will likely be lower before EPA could approve any re-designation.

Robert Ukeiley, law office, Berea, KY

- (b) **Response:** The Cabinet disagrees. USEPA is required to review all NAAQS standards every five years. Sometimes this process gets diverted into the court system and delays will occur. However, this federal review process is on-going and separate from the states' attempts to manage today's air quality issues under the current requirements issued by USEPA.

6. (a) **Comment:** CARB has already lowered its ozone AAQS to below the Boyd County design value for 2002-2005.

Robert Ukeiley, law office, Berea, KY

- (b) **Response:** The Cabinet acknowledges this comment; however the lower CARB design values are outside the scope of this proposed SIP revision.

7. (a) **Comment:** A steady increase in volatile organic compounds (VOC) emissions is indicated in Table 3 and Table 7. The maintenance plan must discuss how maintenance of the 8-hr ozone standard will be achieved when VOC emission are projected to increase by 7% from 2004-2018.

Kay T. Prince, USEPA

- (b) **Response:** The Cabinet discusses the VOC increase in the "Emissions Projection Methodology" (page 16). The VOC upward projection trend is due to Bureau of Economic Analysis growth factors applied to the point source category. The point source category, specifically the refinery, is the major contributor to the VOC increase. However, the refinery is undergoing a project entitled the Refinery Modernization Project. Modifications to the facility permit, effective March 2004, have decreased overall VOC emissions for the area. These reductions, which will be accounted for in the first triennial assessment, are not reflected in the current emission inventory numbers.

8. (a) **Comment:** Table 7 is used to demonstrate maintenance of the 8-hr ozone standard. It appears that the 2004 attainment year emissions were developed from the 2002 emissions inventory. The attainment year emissions (i.e., 2004) must be used in the maintenance demonstration period (2004-2018). EPA recommends removing the 2002 emissions from Table 7 or clearly stating in the narrative that 2002 is not used as the base year.

Kay T. Prince, USEPA

- (b) **Response:** The Cabinet acknowledges using 2002 as the base year and developing 2004 attainment year numbers from the base year. As noted in the previous comment above, the Refinery has major VOC reductions (page 21) that will occur by 2006 under the Refinery Modernization Project. Kentucky did not take credit for these reductions in the interim and out years; however these overall facility emission reductions will reduce the

projected growth in VOC emissions that resulted from applying the BEA growth indicators to the projection calculations for the point source category.

- 9. (a) Comment:** Paragraph one of the Introduction should be revised to correctly describe the Huntington-Ashland 8-hr nonattainment area. The nonattainment area is a subset of and not the Ashland-Huntington, Kentucky-West Virginia-Ohio Metropolitan Statistical Area (MSA) as written in the submittal.

Kaye T. Prince, USEPA

- (b) Response:** The Cabinet concurs and has corrected the appropriate references.

- 10. (a) Comment:** The Introduction should briefly introduce to the reader the items that are needed to redesignate an area: approved SIP, clean air quality data meeting the NAAQS, attainment inventory, maintenance plan, permanent and enforceable emission reductions, verification of attainment, and a transportation budget. It could state that these items will be discussed in detail later in the submittal.

Kay T. Prince, USEPA

- (b) Response:** The Cabinet concurs and the document has been revised to more adequately describe the submittal.

- 11. (a) Comment:** The Improvement in Air Quality section should mention that the nonattainment designation was based on air quality data from monitors in the entire nonattainment area. It should clearly state that improvement in air quality in compliance with EPA NAAQS in the entire nonattainment area has been achieved. For a complete picture of air quality in the nonattainment area, ambient air data reports [e.g., trend in design values (minimum analysis), ozone exceedances and trends for 4th high ozone (optional)] should be presented for all monitors in the Huntington-Ashland nonattainment area. Redesignation of the nonattainment area is possible because the entire area has attained the standard.

Kay T. Prince, USEPA

- (b) Response:** The Cabinet concurs and has added AQS data regarding the West Virginia monitor to the narrative and to *Appendix C*.

- 12. (a) Comment:** The “MSA” should be removed from “Ashland-Huntington, KY-WV, MSA ozone nonattainment area” in the first sentence of this section. The “MSA” should also be removed in other places in the submittal.

Kay T. Prince, USEPA

- (b) Response:** The Cabinet concurs and has corrected the appropriate references.

- 13. (a) Comment:** It is assumed that Graph 1 refers to Boyd County. The county name should be added to clarify the origin of this data.

Kay T. Prince, USEPA

(b) Response: The Cabinet concurs and the reference to Boyd County has been added to Graph 1.

14. (a) Comment: A summarized total of the permanent and enforceable reductions in tons per year that were achieved to demonstrate attainment should be included in the main text of each emission reduction program. Having the more detailed discussions on how they were developed in the appendices is acceptable. Having a summarized total of the actual emission reduction estimates in the main text provides a more unambiguous discussion.

Kay T. Prince, USEPA

(b) Response: The Cabinet acknowledges this comment. In demonstrating attainment, the Cabinet summarized the major federal programs that will result in reductions in ozone precursor emissions. The majority of these noted reductions do not have emission factors associated with them that would allow for specific calculations in tons per year units. Nonetheless these are permanent and enforceable programs that will result in significant emission reductions across the total area. Where calculations were used, the reductions are noted in the narrative with detailed development discussions in the appendices.

15. (a) Comment: Most inventories tend to show area source emissions increasing in the future. Table 3 indicates that VOC stationary area source emissions are projected to remain constant in the emission projections from 2004 to 2018. It is unclear what controls are being assumed and why growth can be held constant for this source category.

Kay T. Prince, USEPA

(b) Response: The area source categories are projected using census population projections. The population for Boyd County is projected to steadily *decrease* through 2018. A statement has been added to the narrative to further explain. The Boyd County population projections are included in *Appendix I*.

16. (a) Comment: For purposes of transportation conformity implementation, please clarify minimum and maximum temperatures used to develop the motor vehicle emissions budget. Per 40 CFR 93.122(a)(6) these temperatures must be used for conformity. It appears from the documentation in Appendix D, that the minimum and maximum temperatures used were 64 and 90 degrees F.

Kay T. Prince, USEPA

(b) Response: The temperature data used in developing the mobile emissions budgets was included in Appendix D. However, in order to insure a review of the applicable appendices, documentation is unnecessary. The Cabinet has added the minimum temperature, 64 degrees F and the maximum temperature, 90 degrees F, to the narrative on page 20.